METHOD AND SYSTEM FOR HANDLING QUEUE OVERFLOW DURING IN-CACHE GARBAGE COLLECTION

ABSTRACT OF THE DISCLOSURE

In a method for handling queue overflow in an in-cache garbage collection process, a first object cache is scanned to identify live objects. If the identified live objects reside in the first object cache, then the object identifiers (OIDs) for the identified live objects are stored in a first broadcast queue associated with the first object cache. For live objects that were not processed due to an overflow of the first broadcast queue, bits are set in a register to identify portions of the first object cache that include live objects that were not processed. To locate the unprocessed live objects for processing, the first object cache is rescanned, but only the portions of the first object cache that are identified by the bits set in register are rescanned. A system for managing queue overflow in an in-cache garbage collection process carried out in a multi-processor environment also is described.